TTL
Technology and Tradition

Construction Materials Engineering and Testing ■
Environmental Engineering and Consulting ■
Geotechnical Engineering ■
Analytical Services ■

December 22, 2004

Mr. Buddy Cox, P. E.
Bureau of Materials and Tests
Alabama Department of Transportation
3700 Fairground Road
Montgomery, Alabama 36109

RE: Analytical Results from
Low-lying Locations N, O, and P
October 20, 2004
Coliseum Boulevard Plume
Montgomery, Alabama

Dear Mr. Cox:

On October 20, 2004, **TTL** collected surface-water and sediment samples from locations N, O, and P in the Low-Lying area as part of the investigation of the Coliseum Boulevard Plume. Locations N, O, and P are located in the area south of the Northern Boulevard and north of Russell Corporation. This Low-Lying area is about 2 acres. In January and March 2004, concentrations of TCE (trichloroethylene) were reported at 750 and 104 µg/kg (micrograms per kilogram) in the sediment at location O, respectively. As such, locations N, O, and P are being monitored quarterly to determine whether concentrations in this area are increasing. The samples were analyzed for VOC's using Method 5035/8260 (sediment) and 8260 (water) as outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.

Only location O had reportable concentrations of constituents of concern from the sediment samples. Concentrations of TCE (54.4 µg/kg), and cis-1,2-Dichloroethene (5.6J µg/kg) were detected in the sediment samples collected during October (see Figure 1a and Table 1a). Toluene (4.5J µg/kg) was reported at location O; however, toluene is not a constituent of concern for this investigation.

During the October 2004 sampling event, TCE concentrations were reported for two (locations N and P) of the three surface water sample locations (see Figure 1b and Table 1b). TCE was reported at concentrations of 10.7J µg/l and 22.5 µg/l at locations N and P, respectively. Additionally, cis-1,2-Dichloroethene was reported at a concentration of 10.2J µg/l and vinyl chloride at 1.7J µg/l at location O. Laboratory reports are included as an attachment.

4154 Lomac Street ■ Montgomery, Alabama 36106-2886 ■ 334.244.0766 ■ Fax 334.244.6668

The next surface-water and sediment monitoring of the Low-Lying areas are scheduled for January 2005. During the January event, samples will be collected from all 16 sampling locations to coincide with the period of the year in which the greatest concentrations of TCE have been detected in sediment and surface water samples.

TTL, Inc.

Kimberly D. Harruff
Environmental Biologist

Ashley C. Cousins (SCB)
Ashley C. Cousins, P. E., CHMM

Table 1a. Concentrations of detected volatile organic compounds (VOCs)[1] in samples of sediment from the "Low-Lying Areas"; October 20, 2004 Summary Report; Coliseum Boulevard Plume Investigation; Montgomery, Alabama. [Distributions of VOCs in sediment/soil samples are shown on Figure 1a.]

			Sediment Lab Results										
			Trichloroethylene	Cis-1,2-Dichloroethene	Vinyl Chloride	Benzene	Cis-1,3-Dichloropropene	M,P,O-Xylenes	Methylene Chloride[2]	Toluene	Trichlorofluoromethane	Ethyl Benzene	Trans-1,2-Dichloroethene
			[Concentrations are in micrograms per kilogram (µg/kg)]										
Sample Location Identifier	Sample Date	Approximate Sample Depth (inches)	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]	3.0 µg/kg[3]
N	11/15/01	3	50.6J[4]	ND[5]	ND	ND	ND	ND	6.6J	16.4J	ND	ND	ND
	2/13/02	9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/22/02	10	ND	ND	ND	ND	ND	ND	3.3J	ND	ND	ND	ND
	9/17/02[6]	8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-dup[7]	9/17/02[6]	8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N	10/31/02	12	ND	ND	ND	ND	ND	ND	ND	3.2J	ND	ND	ND
	1/14/03[8]	8	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)
	7/21/03	2	3.6J	ND	3.0J	ND	ND	ND	ND	ND	ND	ND	ND
	1/29/04	8	ND	ND	ND	ND	ND	5.3J	ND	3.2J	ND	ND	ND
	7/26/04	8	ND	ND	ND	ND	ND	7.0J	ND	5.1J	ND	ND	ND
	10/20/04	8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-dup	10/20/04	8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O	11/15/01	3	ND	ND	ND	ND	ND	ND	3.1J	3.3J	ND	ND	ND
	2/13/02	8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/22/02	8	ND	ND	ND	ND	ND	ND	4.8J	4.0J	5.7J	ND	ND
	9/17/02[6]	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/31/02	12	ND	ND	35.1	ND	ND	ND	ND	7.1J	ND	ND	ND
	1/14/03[8]	11	ND (<1.6)	ND (<1.6)	ND (<1.6)	ND (<1.6)	ND (<1.6)	ND (<1.6)	ND (<1.6)	ND (<1.6)	ND (<1.6)	ND (<1.6)	ND (<1.6)
	7/21/03	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1/29/04	8	750	18.8J	ND	ND	ND	31.2J	ND	15.9J	ND	5.2J	ND
	3/9/04[9]	15	104	35.4J	6.3J	ND	ND	ND	ND	5.5J	ND	ND	ND
	4/14/04[10]	8-12	ND	3.4J	3.9J	ND	ND	ND	ND	6.1J	ND	ND	ND
	7/26/04	12	ND	3.9J	ND	ND	ND	31.4J	ND	12.1J	ND	6.8J	ND
	10/20/04	10	54.4	5.6J	ND	ND	ND	ND	ND	4.5J	ND	ND	ND
O - East	4/14/04[10]	8-12	ND	6.2J	ND	ND	ND	ND	ND	9.5J	ND	ND	ND
O - North	4/14/04[10]	8-12	ND	ND	ND	ND	ND	ND	ND	3.4J	ND	ND	ND
O - South	4/14/04[10]	8-12	ND	3.1J	5.1J	ND	ND	ND	ND	6.1J	ND	ND	ND
O - West 1	4/14/04[10]	8-12	81.1	486	44.7	ND	ND	ND	ND	6.3J	ND	ND	25.9J
O - West 1 dup	4/14/04[10]	8-12	ND	22.3J	30.4J	ND	ND	ND	ND	6.7J	ND	ND	3.0J
O - West 2	4/14/04[10]	8-12	ND	ND	8.0J	ND	ND	ND	ND	11.0J	ND	ND	ND
P	11/15/01	2	ND	ND	ND	ND	ND	ND	ND	ND	7.1J	ND	ND
	2/13/02	9	10.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/22/02	11	7.0J	ND	ND	ND	ND	ND	6.7J	ND	ND	ND	ND
	9/17/02[6]	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/31/02	8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1/14/03[8]	10	11.0	ND (<1.1)	ND (<1.1)	ND (<1.1)	ND (<1.1)	ND (<1.1)	ND (<1.1)	ND (<1.1)	ND (<1.1)	ND (<1.1)	ND (<1.1)
	7/21/03	8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1/29/04	8	12.2J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	7/26/04	12	ND	ND	ND	ND	ND	5.5J	ND	3.9J	ND	ND	ND
	10/20/04	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

[1] Samples were analyzed by **TTL, Inc.** in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.

[2] Methylene Chloride is considered to have been present in the laboratory during analysis of the samples.

[3] MDL - Method Detection Limit of 3.0 micrograms per kilogram (µg/kg) for the soil laboratory analyses

[4] J - Concentration below the calibration curve, but above the detection limit

[5] ND - Not Detected

[6] Results on September 17, 2002, are reported on "wet-weight" basis.

[7] dup - Duplicate sample collected for quality assurance/quality control purposes.

[8] Sediment samples collected on 1/14/03 were analyzed by STL Laboratories because **TTL**'s laboratory equipment malfunctioned. STL's method detection limits varied for some samples and are indicated in parentheses ( ).

[9] In the sediment sample collected at location O on January 29, 2004, low mass and low percent solids present in the sample possibly resulted in an ambiguous level of TCE; therefore another sample was collected on March 9, 2004.

[10] On April 14, 2004, location O was sampled for verification and delineation of TCE detected in the sediment samples collected on January 29 and March 9, 2004.

Table 1b. Concentrations of detected volatile organic compounds (VOCs)[1] in samples of surface water from the "Low-Lying Areas"; October 20, 2004 Summary Report; Coliseum Boulevard Plume Investigation; Montgomery, Alabama.
[Distributions of VOCs in surface-water samples are shown on Figure 1b.]

		Aqueous Lab Results					
Sample Identifier	Sample Date	Trichloroethylene	Cis-1,2-Dichloroethene	Vinyl Chloride	Chloromethane	Methylene Chloride[2]	Toluene
		[Concentrations are in micrograms per liter (µg/l)]					
		1.0 µg/l [3]	1.0 µg/l [3]	1.0 µg/l [3]	1.0 µg/l [3]	1.0 µg/l [3]	1.0 µg/l [3]
N	11/15/01	7.0J[4]	ND[5]	ND	ND	ND	ND
	2/13/02	16.8J	ND	ND	ND	ND	ND
	5/22/02	7.6J	ND	ND	ND	ND	ND
	9/17/02	3.7J	ND	ND	ND	ND	ND
N-dup[6]	9/17/02	3.7J	ND	ND	ND	ND	ND
N	10/31/02	10.0J	ND	ND	ND	ND	ND
	1/14/03	15.2J	ND	ND	ND	ND	ND
	7/21/03	28.0	ND	ND	ND	ND	ND
	1/29/04	15.2J	ND	ND	3.2J	ND	ND
	7/26/04	11.9J	ND	ND	ND	ND	ND
	10/20/04	10.7J	ND	ND	ND	ND	ND
N-dup	10/20/04	10.4J	ND	ND	ND	ND	ND
O	11/15/01	NC[7]	NC	NC	NC	NC	NC
	2/13/02	ND	ND	ND	ND	ND	ND
	5/22/02	NC	NC	NC	NC	NC	NC
	9/17/02	ND	ND	ND	1.0J	ND	ND
	10/31/02	2.5J	15.3J	4.8J	ND	ND	ND
	1/14/03	4.8J	14.4J	ND	ND	ND	ND
	7/21/03	NC	NC	NC	NC	NC	NC
	1/29/04	31.8	6.9J	ND	4.5J	ND	ND
	7/26/04	ND	5.4J	1.3J	ND	ND	ND
	10/20/04	ND	10.2J	1.7J	ND	ND	ND
P	11/15/01	16.8J	ND	ND	ND	ND	ND
	2/13/02	41.2	ND	ND	ND	ND	ND
	5/22/02	22.4	ND	ND	ND	ND	ND
	9/17/02	10.5J	ND	ND	ND	ND	ND
	10/31/02	25.1	ND	ND	ND	ND	ND
	1/14/03	43.2	ND	ND	ND	ND	ND
	7/21/03	42.2	ND	ND	ND	ND	ND
	1/29/04	25.0	ND	ND	2.3J	ND	ND
	7/26/04	23.4	ND	ND	ND	ND	ND
	10/20/04	22.5	ND	ND	ND	ND	ND
Rinse	10/20/04	ND	ND	ND	ND	ND	ND
Blank	10/20/04	ND	ND	ND	ND	ND	ND

Notes:

[1] Samples were analyzed by **TTL, Inc.** in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.

[2] Methylene Chloride is considered to have been present in the laboratory during analysis of the samples.

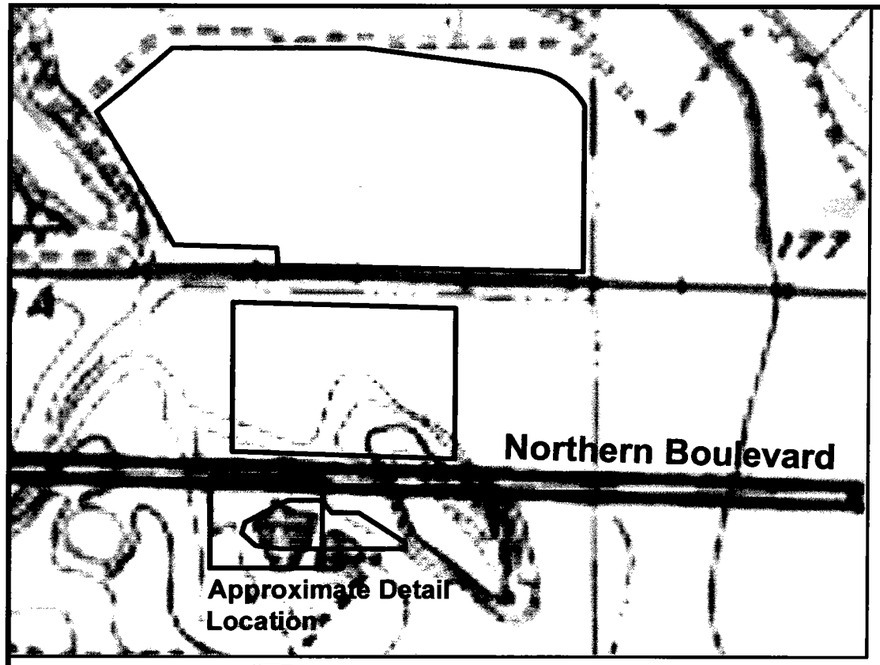
[3] MDL - Method Detection Limit of 1.0 microgram per liter (µg/l) for the aqueous laboratory analyses

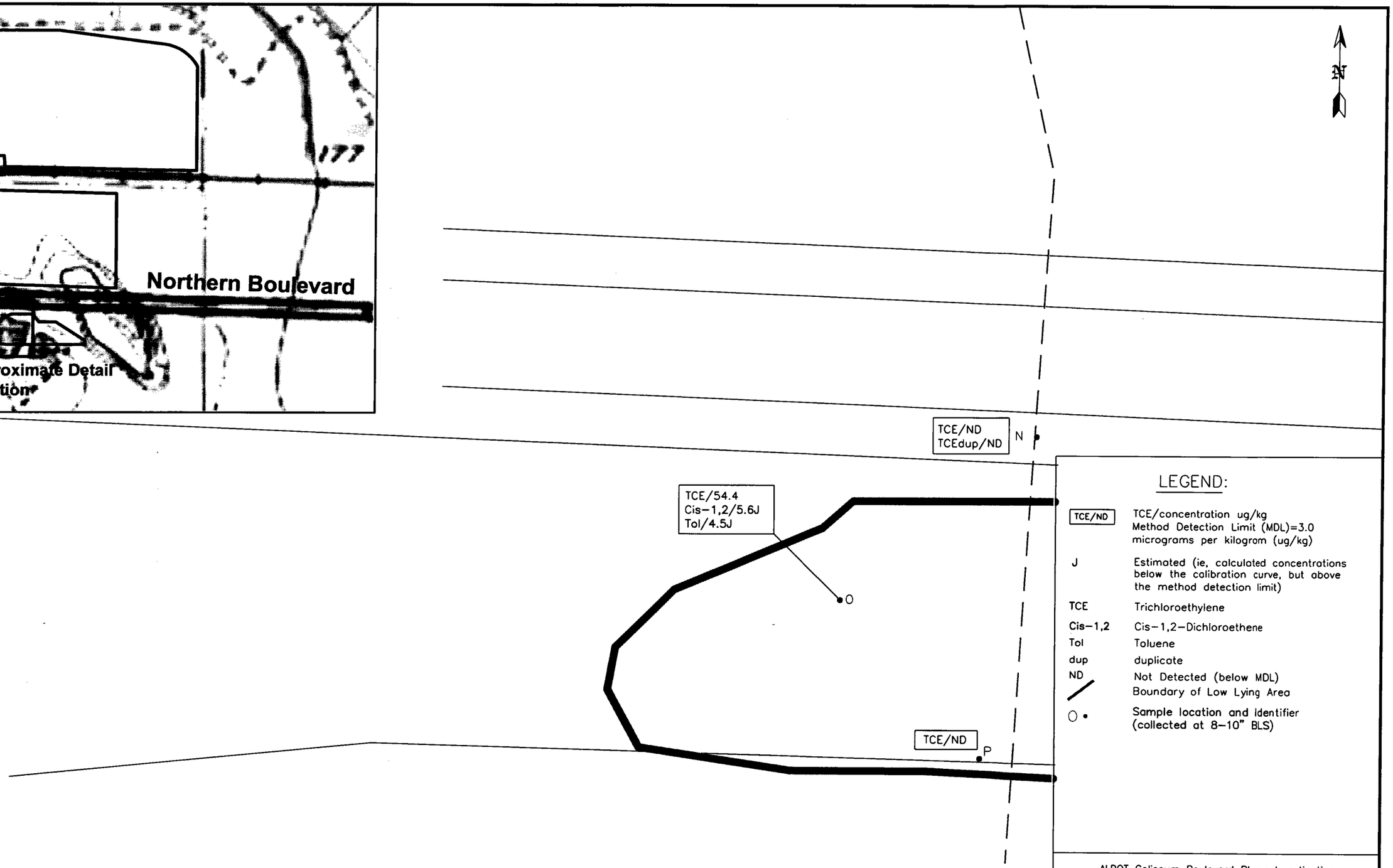
[4] J - Concentration below the calibration curve, but above the method detection limit

[5] ND - Not Detected

[6] dup - Duplicate sample collected for quality assurance/quality control purposes.

[7] NC - Not Collected because located did not have water present.





LEGEND:

TCE/ND	TCE/concentration ug/kg Method Detection Limit (MDL)=3.0 micrograms per kilogram (ug/kg)
J	Estimated (ie, calculated concentrations below the calibration curve, but above the method detection limit)
TCE	Trichloroethylene
Cis-1,2	Cis-1,2-Dichloroethene
Tol	Toluene
dup	duplicate
ND	Not Detected (below MDL)
/	Boundary of Low Lying Area
O •	Sample location and Identifier (collected at 8-10" BLS)

ALDOT Coliseum Boulevard Plume Investigation

TTL Technology and Tradition
4154 Lomac Street ■ Montgomery, Alabama 36106
334.244.0766 ■ Fax 334.244.6668

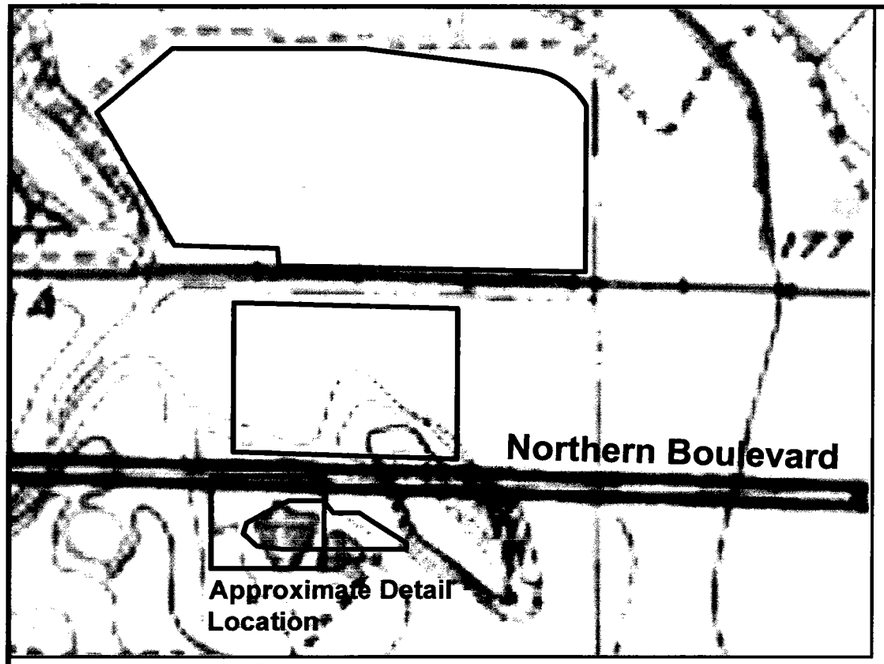
Analytical results of sediment samples on October 20, 2004. Investigation of "Low-Lying Areas". Coliseum Boulevard Plume. Montgomery, Alabama.

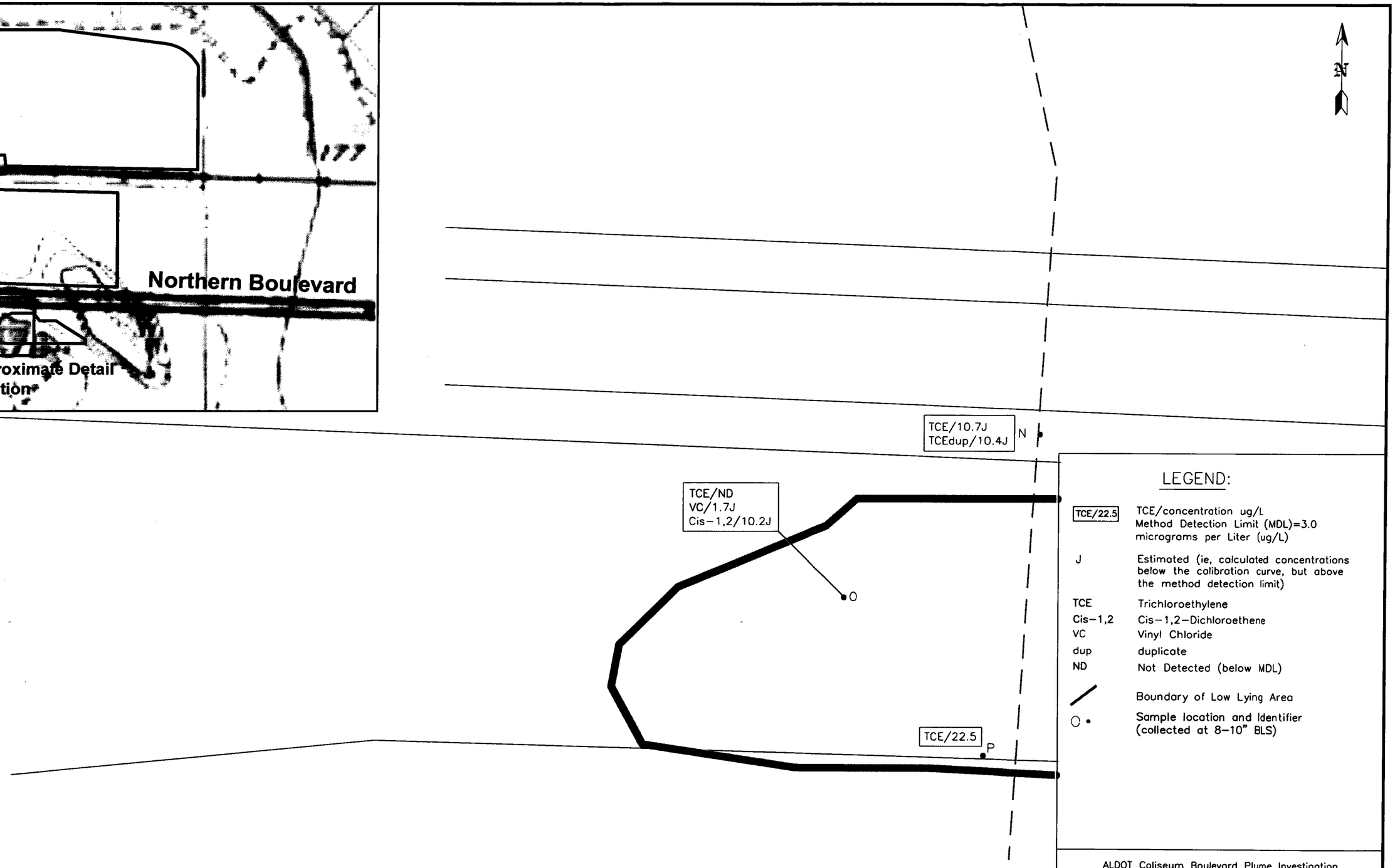
TTL PROJECT NUMBER:0700-024

Drawing No. 040414

SCALE: 1" = 40'

Figure 1a





LEGEND:

TCE/22.5	TCE/concentration ug/L Method Detection Limit (MDL)=3.0 micrograms per Liter (ug/L)
J	Estimated (ie, calculated concentrations below the calibration curve, but above the method detection limit)
TCE	Trichloroethylene
Cis-1,2	Cis-1,2-Dichloroethene
VC	Vinyl Chloride
dup	duplicate
ND	Not Detected (below MDL)
/	Boundary of Low Lying Area
O •	Sample location and Identifier (collected at 8-10" BLS)

ALDOT Coliseum Boulevard Plume Investigation

TTL Technology and Tradition
4154 Lomac Street • Montgomery, Alabama 36106
334.244.0766 • Fax 334.244.5666

Analytical results of water samples on October 20, 2004. Investigation of "Low-Lying Areas". Coliseum Boulevard Plume. Montgomery, Alabama.

TTL PROJECT NUMBER:0700-024

Drawing No. 040414

SCALE: 1" = 40'

Figure 1b

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Client: Alabama Department of Transportation
Sample Date: October 20, 2004
Date Analyzed: October 28, 2004
Analyzed By: TTL Personnel (VJB)
Sample Type: Soil
Sampled By: TTL Personnel (WGM, KJM)
Sample Site: Coliseum Boulevard Plume, Montgomery, AL
Sample ID: N (8")
TTL Lab Number: 041021033-001A
TTL Job Number: 0700-024

VOLATILE ORGANIC HYDROCARBONS

COMPOUNDS	RESULTS, µg/Kg	FLAG*
Chloromethane:	3.0	ND
Vinyl Chloride:	3.0	ND
Chloroethane:	3.0	ND
Trichlorofluoromethane:	3.0	ND
1,1-Dichloroethene:	3.0	ND
Methylene Chloride:	3.0	ND
Trans-1,2-Dichloroethene:	3.0	ND
1,1-Dichloroethane:	3.0	ND
Cis-1,2-Dichloroethene:	3.0	ND
Chloroform:	3.0	ND
1,1,1-Trichloroethane:	3.0	ND
Carbon Tetrachloride:	3.0	ND
Benzene:	3.0	ND
1,2-Dichloroethane:	3.0	ND
Trichloroethylene:	3.0	ND
1,2-Dichloropropane:	3.0	ND
Bromodichloromethane:	3.0	ND
CIS-1,3-Dichloropropene:	3.0	ND
Toluene:	3.0	ND
Trans-1,3-Dichloropropene:	3.0	ND
1,1,2-Trichloroethane:	3.0	ND
Tetrachloroethylene:	3.0	ND
Dibromochloromethane:	3.0	ND
Chlorobenzene:	3.0	ND
1,1,1,2-Tetrachloroethane:	3.0	ND
Ethylbenzene:	3.0	ND
M,P-Xylenes:	3.0	ND
O-Xylene:	3.0	ND
Bromoform:	3.0	ND
1,1,2,2-Tetrachloroethane:	3.0	ND
1,3-Dichlorobenzene:	3.0	ND
1,4-Dichlorobenzene:	3.0	ND
1,2-Dichlorobenzene:	3.0	ND

The sample was analyzed in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.

V. Jesse Burns, Chemist

** The sample was reanalyzed out of holding time.
* J = reportable concentration less than the lowest concentration level of the instrument calibration curve but above the detection limit. ND = concentration of the compound cannot be found at or above the detection limit. B = concentration of the compound was found above the detection limit in the laboratory blank sample. Blank = a reportable contaminant present.

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Client: Alabama Department of Transportation
Sample Date: October 20, 2004
Date Analyzed: October 28, 2004
Analyzed By: TTL Personnel (VJB)
Sample Type: Soil
Sampled By: TTL Personnel (WGM, KJM)
Sample Site: Coliseum Boulevard Plume, Montgomery, AL
Sample ID: N Dup (8")
TTL Lab Number: 041021033-002A
TTL Job Number: 0700-024

VOLATILE ORGANIC HYDROCARBONS

COMPOUNDS	RESULTS, µg/Kg	FLAG*
Chloromethane:	3.0	ND
Vinyl Chloride:	3.0	ND
Chloroethane:	3.0	ND
Trichlorofluoromethane:	3.0	ND
1,1-Dichloroethene:	3.0	ND
Methylene Chloride:	3.0	ND
Trans-1,2-Dichloroethene:	3.0	ND
1,1-Dichloroethane:	3.0	ND
Cis-1,2-Dichloroethene:	3.0	ND
Chloroform:	3.0	ND
1,1,1-Trichloroethane:	3.0	ND
Carbon Tetrachloride:	3.0	ND
Benzene:	3.0	ND
1,2-Dichloroethane:	3.0	ND
Trichloroethylene:	3.0	ND
1,2-Dichloropropane:	3.0	ND
Bromodichloromethane:	3.0	ND
CIS-1,3-Dichloropropene:	3.0	ND
Toluene:	3.0	ND
Trans-1,3-Dichloropropene:	3.0	ND
1,1,2-Trichloroethane:	3.0	ND
Tetrachloroethylene:	3.0	ND
Dibromochloromethane:	3.0	ND
Chlorobenzene:	3.0	ND
1,1,1,2-Tetrachloroethane:	3.0	ND
Ethylbenzene:	3.0	ND
M,P-Xylenes:	3.0	ND
O-Xylene:	3.0	ND
Bromoform:	3.0	ND
1,1,2,2-Tetrachloroethane:	3.0	ND
1,3-Dichlorobenzene:	3.0	ND
1,4-Dichlorobenzene:	3.0	ND
1,2-Dichlorobenzene:	3.0	ND

The sample was analyzed in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.

V. Jesse Burns, Chemist

** The sample was reanalyzed out of holding time.
* J = reportable concentration less than the lowest concentration level of the instrument calibration curve but above the detection limit. ND = concentration of the compound cannot be found at or above the detection limit. B = concentration of the compound was found above the detection limit in the laboratory blank sample. Blank = a reportable contaminant present.

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Environmental Engineering and Consulting ■
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Analytical Services ■

Client: Alabama Department of Transportation
Sample Date: October 20, 2004
Date Analyzed: October 28, 2004
Analyzed By: TTL Personnel (VJB)
Sample Type: Soil
Sampled By: TTL Personnel (WGM, KJM)
Sample Site: Coliseum Boulevard Plume, Montgomery, AL
Sample ID: O (10")
TTL Lab Number: 041021033-003A
TTL Job Number: 0700-024

VOLATILE ORGANIC HYDROCARBONS

COMPOUNDS	RESULTS, µg/Kg	FLAG*
Chloromethane:	3.0	ND
Vinyl Chloride:	3.0	ND
Chloroethane:	3.0	ND
Trichlorofluoromethane:	3.0	ND
1,1-Dichloroethene:	3.0	ND
Methylene Chloride:	3.0	ND
Trans-1,2-Dichloroethene:	3.0	ND
1,1-Dichloroethane:	3.0	ND
Cis-1,2-Dichloroethene:	5.6	J
Chloroform:	3.0	ND
1,1,1-Trichloroethane:	3.0	ND
Carbon Tetrachloride:	3.0	ND
Benzene:	3.0	ND
1,2-Dichloroethane:	3.0	ND
Trichloroethylene:	54.4	
1,2-Dichloropropane:	3.0	ND
Bromodichloromethane:	3.0	ND
CIS-1,3-Dichloropropene:	3.0	ND
Toluene:	4.5	J
Trans-1,3-Dichloropropene:	3.0	ND
1,1,2-Trichloroethane:	3.0	ND
Tetrachloroethylene:	3.0	ND
Dibromochloromethane:	3.0	ND
Chlorobenzene:	3.0	ND
1,1,1,2-Tetrachloroethane:	3.0	ND
Ethylbenzene:	3.0	ND
M,P-Xylenes:	3.0	ND
O-Xylene:	3.0	ND
Bromoform:	3.0	ND
1,1,2,2-Tetrachloroethane:	3.0	ND
1,3-Dichlorobenzene:	3.0	ND
1,4-Dichlorobenzene:	3.0	ND
1,2-Dichlorobenzene:	3.0	ND

The sample was analyzed in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.

V. Jesse Burns, Chemist

** The sample was reanalyzed out of holding time.
* J = reportable concentration less than the lowest concentration level of the instrument calibration curve but above the detection limit. ND = concentration of the compound cannot be found at or above the detection limit. B = concentration of the compound was found above the detection limit in the laboratory blank sample. Blank = a reportable contaminant present.

Client: Alabama Department of Transportation
Sample Date: October 20, 2004
Date Analyzed: October 28, 2004
Analyzed By: TTL Personnel (VJB)
Sample Type: Soil
Sampled By: TTL Personnel (WGM, KJM)
Sample Site: Coliseum Boulevard Plume, Montgomery, AL
Sample ID: P (10")
TTL Lab Number: 041021033-004A
TTL Job Number: 0700-024

VOLATILE ORGANIC HYDROCARBONS

COMPOUNDS	RESULTS, µg/Kg	FLAG*
Chloromethane:	3.0	ND
Vinyl Chloride:	3.0	ND
Chloroethane:	3.0	ND
Trichlorofluoromethane:	3.0	ND
1,1-Dichloroethene:	3.0	ND
Methylene Chloride:	3.0	ND
Trans-1,2-Dichloroethene:	3.0	ND
1,1-Dichloroethane:	3.0	ND
Cis-1,2-Dichloroethene:	3.0	ND
Chloroform:	3.0	ND
1,1,1-Trichloroethane:	3.0	ND
Carbon Tetrachloride:	3.0	ND
Benzene:	3.0	ND
1,2-Dichloroethane:	3.0	ND
Trichloroethylene:	3.0	ND
1,2-Dichloropropane:	3.0	ND
Bromodichloromethane:	3.0	ND
CIS-1,3-Dichloropropene:	3.0	ND
Toluene:	3.0	ND
Trans-1,3-Dichloropropene:	3.0	ND
1,1,2-Trichloroethane:	3.0	ND
Tetrachloroethylene:	3.0	ND
Dibromochloromethane:	3.0	ND
Chlorobenzene:	3.0	ND
1,1,1,2-Tetrachloroethane:	3.0	ND
Ethylbenzene:	3.0	ND
M,P-Xylenes:	3.0	ND
O-Xylene:	3.0	ND
Bromoform:	3.0	ND
1,1,2,2-Tetrachloroethane:	3.0	ND
1,3-Dichlorobenzene:	3.0	ND
1,4-Dichlorobenzene:	3.0	ND
1,2-Dichlorobenzene:	3.0	ND

The sample was analyzed in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.

V. Jesse Burns, Chemist

** The sample was reanalyzed out of holding time.
* J = reportable concentration less than the lowest concentration level of the instrument calibration curve but above the detection limit. ND = concentration of the compound cannot be found at or above the detection limit. B = concentration of the compound was found above the detection limit in the laboratory blank sample. Blank = a reportable contaminant present.

TTL WORK ORDER NUMBER
041021033

Sheet 1 of 1

Chain of Custody Form

Client: ALDOT CBP
Contact: Kidada Dixon
Mailing Address: 4154 LOMAC ST.
City, State, Zip: Montg. AL 36106
Phone No.: 334-244-0766
Date: 10/20/04
Sampled By: WGM, KJM
Sample Site: LOW LYING AREA
TTL Job No.: 0700.024 Client P.O. #

Sample Security Requirements

1. Condition of Contents: Good
2. Sealed for Shipping By: KM
3. Initial Contents Temp.: ICE °C Seal Applied Yes ___ No ✓
4. Sampling Status: Complete Expected Completion Date ___
5. Custody Seal Intact Upon Receipt by Laboratory: Yes ___ No ✓
6. Condition of Contents: good
7. Comments: ICE
8. Reporting Status: Routine; ASAP By ___; Rush By ___

Date	Time	Sample ID/Description	Sample Type	Sample Method		# of Containers	Preservatives	Analysis Parameters
			Solid, Etc.	Grab	Comp			
10/20/04	3:00pm	N (8")	SOIL	✓		4	ICE	VOC
↓		N Dup (8")	↓	↓		↓	↓	↓
	3:20pm	O (10")	↓	↓		↓	↓	↓
↓	3:35pm	P (10")	SOIL	✓		4	ICE	VOC

CUSTODY TRANSFERS PRIOR TO SHIPPING

Relinquished by: (signed) Date/Time
1 [signature] 10/20/04
2 [signature] 10-21-04 1:10PM
3

Received by (signed) Date/Time
1 [signature] 10-21-04 9:30AM
2
3

SHIPPING DETAILS

Air Bill #:
Method of Shipment: TTL
Received By Lab: [signature]
Date/Time 10/21/04 1310

TTL, Inc. - Tuscaloosa Office/Laboratory: 3516 Greensboro Avenue, Tuscaloosa, Alabama 35401, Telephone (205) 345-0816, FAX (205) 345-0992
TTL, Inc. - Montgomery Office: 4154 Lomac Street, Montgomery, Alabama 36106, Telephone (334) 244-0766, FAX (334) 244-6668
TTL, Inc. - Florence Office: 523 South Wood Avenue, Florence, Alabama, Telephone (256) 766-4622, FAX (256) 760-4626

Client: Alabama Department of Transportation
Sample Date: October 20, 2004
Date Analyzed: October 25, 2004
Analyzed By: TTL Personnel (VJB)
Sample Type: Aqueous
Sampled By: TTL Personnel (WGM, KJM)
Sample Site: Coliseum Boulevard Plume, Montgomery, AL
Sample ID: N
TTL Lab Number: 041021032-001A
TTL Job Number: 0700-024

VOLATILE ORGANIC HYDROCARBONS

COMPOUNDS	RESULTS, µg/L	FLAG*
Chloromethane:	1.0	ND
Vinyl Chloride:	1.0	ND
Chloroethane:	1.0	ND
Trichlorofluoromethane:	1.0	ND
1,1-Dichloroethene:	1.0	ND
Methylene Chloride:	1.0	ND
Trans-1,2-Dichloroethene:	1.0	ND
1,1-Dichloroethane:	1.0	ND
Cis-1,2-Dichloroethene:	1.0	ND
Chloroform:	1.0	ND
1,1,1-Trichloroethane:	1.0	ND
Carbon Tetrachloride:	1.0	ND
Benzene:	1.0	ND
1,2-Dichloroethane:	1.0	ND
Trichloroethylene:	10.7	J
1,2-Dichloropropane:	1.0	ND
Bromodichloromethane:	1.0	ND
CIS-1,3-Dichloropropene:	1.0	ND
Toluene:	1.0	ND
Trans-1,3-Dichloropropene:	1.0	ND
1,1,2-Trichloroethane:	1.0	ND
Tetrachloroethylene:	1.0	ND
Dibromochloromethane:	1.0	ND
Chlorobenzene:	1.0	ND
1,1,1,2-Tetrachloroethane:	1.0	ND
Ethylbenzene:	1.0	ND
M,P-Xylenes:	1.0	ND
O-Xylene:	1.0	ND
Bromoform:	1.0	ND
1,1,2,2-Tetrachloroethane:	1.0	ND
1,3-Dichlorobenzene:	1.0	ND
1,4-Dichlorobenzene:	1.0	ND
1,2-Dichlorobenzene:	1.0	ND

The sample was analyzed in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.

V. Jesse Burns, Chemist

** The sample was reanalyzed out of holding time.
* J = reportable concentration less than the lowest concentration level of the instrument calibration curve but above the detection limit. ND = concentration of the compound cannot be found at or above the detection limit. B = concentration of the compound was found above the detection limit in the laboratory blank sample. Blank = a reportable contaminant present.

Client: Alabama Department of Transportation
Sample Date: October 20, 2004
Date Analyzed: October 26, 2004
Analyzed By: TTL Personnel (VJB)
Sample Type: Aqueous
Sampled By: TTL Personnel (WGM, KJM)
Sample Site: Coliseum Boulevard Plume, Montgomery, AL
Sample ID: N Dup
TTL Lab Number: 041021032-002A
TTL Job Number: 0700-024

VOLATILE ORGANIC HYDROCARBONS

COMPOUNDS	RESULTS, µg/L	FLAG*
Chloromethane	1.0	ND
Vinyl Chloride	1.0	ND
Chloroethane	1.0	ND
Trichlorofluoromethane	1.0	ND
1,1-Dichloroethene	1.0	ND
Methylene Chloride	1.0	ND
Trans-1,2-Dichloroethene	1.0	ND
1,1-Dichloroethane	1.0	ND
Cis-1,2-Dichloroethene	1.0	ND
Chloroform	1.0	ND
1,1,1-Trichloroethane	1.0	ND
Carbon Tetrachloride	1.0	ND
Benzene	1.0	ND
1,2-Dichloroethane	1.0	ND
Trichloroethylene	10.4	J
1,2-Dichloropropane	1.0	ND
Bromodichloromethane	1.0	ND
Cis-1,3-Dichloropropene	1.0	ND
Toluene	1.0	ND
Trans-1,3-Dichloropropene	1.0	ND
1,1,2-Trichloroethane	1.0	ND
Tetrachloroethylene	1.0	ND
Dibromochloromethane	1.0	ND
Chlorobenzene	1.0	ND
1,1,1,2-Tetrachloroethane	1.0	ND
Ethyl Benzene	1.0	ND
M,P-Xylenes	1.0	ND
O-Xylene	1.0	ND
Bromoform	1.0	ND
1,1,2,2-Tetrachloroethane	1.0	ND
1,3-Dichlorobenzene	1.0	ND
1,4-Dichlorobenzene	1.0	ND
1,2-Dichlorobenzene	1.0	ND

The sample was analyzed in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.

V. Jesse Burns, Chemist

** The sample was reanalyzed out of holding time.
* J = reportable concentration less than the lowest concentration level of the instrument calibration curve but above the detection limit. ND = concentration of the compound cannot be found at or above the detection limit. B = concentration of the compound was found above the detection limit in the laboratory blank sample. Blank = a reportable contaminant present.

Client: Alabama Department of Transportation
Sample Date: October 20, 2004
Date Analyzed: October 26, 2004
Analyzed By: TTL Personnel (VJB)
Sample Type: Aqueous
Sampled By: TTL Personnel (WGM, KJM)
Sample Site: Coliseum Boulevard Plume, Montgomery, AL
Sample ID: O
TTL Lab Number: 041021032-003A
TTL Job Number: 0700-024

VOLATILE ORGANIC HYDROCARBONS

COMPOUNDS	RESULTS, µg/L	FLAG*
Chloromethane:	1.0	ND
Vinyl Chloride:	1.7	J
Chloroethane:	1.0	ND
Trichlorofluoromethane:	1.0	ND
1,1-Dichloroethene:	1.0	ND
Methylene Chloride:	1.0	ND
Trans-1,2-Dichloroethene:	1.0	ND
1,1-Dichloroethane:	1.0	ND
Cis-1,2-Dichloroethene:	10.2	J
Chloroform:	1.0	ND
1,1,1-Trichloroethane:	1.0	ND
Carbon Tetrachloride:	1.0	ND
Benzene:	1.0	ND
1,2-Dichloroethane:	1.0	ND
Trichloroethylene:	1.0	ND
1,2-Dichloropropane:	1.0	ND
Bromodichloromethane:	1.0	ND
CIS-1,3-Dichloropropene:	1.0	ND
Toluene:	1.0	ND
Trans-1,3-Dichloropropene:	1.0	ND
1,1,2-Trichloroethane:	1.0	ND
Tetrachloroethylene:	1.0	ND
Dibromochloromethane:	1.0	ND
Chlorobenzene:	1.0	ND
1,1,1,2-Tetrachloroethane:	1.0	ND
Ethylbenzene:	1.0	ND
M,P-Xylenes:	1.0	ND
O-Xylene:	1.0	ND
Bromoform:	1.0	ND
1,1,2,2-Tetrachloroethane:	1.0	ND
1,3-Dichlorobenzene:	1.0	ND
1,4-Dichlorobenzene:	1.0	ND
1,2-Dichlorobenzene:	1.0	ND

The sample was analyzed in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.

V. Jesse Burns, Chemist

** The sample was reanalyzed out of holding time.
* J = reportable concentration less than the lowest concentration level of the instrument calibration curve but above the detection limit. ND = concentration of the compound cannot be found at or above the detection limit. B = concentration of the compound was found above the detection limit in the laboratory blank sample. Blank = a reportable contaminant present.

TTL
Technology and Tradition

Construction Materials Engineering and Testing ■
Environmental Engineering and Consulting ■
Geotechnical Engineering ■
Analytical Services ■

Client: Alabama Department of Transportation
Sample Date: October 20, 2004
Date Analyzed: October 26, 2004
Analyzed By: TTL Personnel (VJB)
Sample Type: Aqueous
Sampled By: TTL Personnel (WGM, KJM)
Sample Site: Coliseum Boulevard Plume, Montgomery, AL
Sample ID: P
TTL Lab Number: 041021032-004A
TTL Job Number: 0700-024

VOLATILE ORGANIC HYDROCARBONS

COMPOUNDS	RESULTS, µg/L	FLAG*
Chloromethane:	1.0	ND
Vinyl Chloride:	1.0	ND
Chloroethane:	1.0	ND
Trichlorofluoromethane:	1.0	ND
1,1-Dichloroethene:	1.0	ND
Methylene Chloride:	1.0	ND
Trans-1,2-Dichloroethene:	1.0	ND
1,1-Dichloroethane:	1.0	ND
Cis-1,2-Dichloroethene:	1.0	ND
Chloroform:	1.0	ND
1,1,1-Trichloroethane:	1.0	ND
Carbon Tetrachloride:	1.0	ND
Benzene:	1.0	ND
1,2-Dichloroethane:	1.0	ND
Trichloroethylene:	22.5	
1,2-Dichloropropane:	1.0	ND
Bromodichloromethane:	1.0	ND
CIS-1,3-Dichloropropene:	1.0	ND
Toluene:	1.0	ND
Trans-1,3-Dichloropropene:	1.0	ND
1,1,2-Trichloroethane:	1.0	ND
Tetrachloroethylene:	1.0	ND
Dibromochloromethane:	1.0	ND
Chlorobenzene:	1.0	ND
1,1,1,2-Tetrachloroethane:	1.0	ND
Ethylbenzene:	1.0	ND
M,P-Xylenes:	1.0	ND
O-Xylene:	1.0	ND
Bromoform:	1.0	ND
1,1,2,2-Tetrachloroethane:	1.0	ND
1,3-Dichlorobenzene:	1.0	ND
1,4-Dichlorobenzene:	1.0	ND
1,2-Dichlorobenzene:	1.0	ND

The sample was analyzed in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.

V. Jesse Burns, Chemist

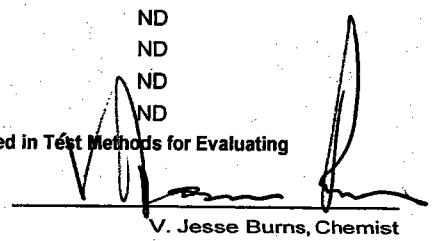
** The sample was reanalyzed out of holding time.
* J = reportable concentration less than the lowest concentration level of the instrument calibration curve but above the detection limit. ND = concentration of the compound cannot be found at or above the detection limit. B = concentration of the compound was found above the detection limit in the laboratory blank sample. Blank = a reportable contaminant present.

Client: Alabama Department of Transportation
Sample Date: October 20, 2004
Date Analyzed: October 26, 2004
Analyzed By: TTL Personnel (VJB)
Sample Type: Aqueous
Sampled By: TTL Personnel (WGM, KJM)
Sample Site: Coliseum Boulevard Plume, Montgomery, AL
Sample ID: Equipment Rinse
TTL Lab Number: 041021032-005A
TTL Job Number: 0700-024

VOLATILE ORGANIC HYDROCARBONS

COMPOUNDS	RESULTS, µg/L	FLAG*
Chloromethane:	1.0	ND
Vinyl Chloride:	1.0	ND
Chloroethane:	1.0	ND
Trichlorofluoromethane:	1.0	ND
1,1-Dichloroethene:	1.0	ND
Methylene Chloride:	1.0	ND
Trans-1,2-Dichloroethene:	1.0	ND
1,1-Dichloroethane:	1.0	ND
Cis-1,2-Dichloroethene:	1.0	ND
Chloroform:	1.0	ND
1,1,1-Trichloroethane:	1.0	ND
Carbon Tetrachloride:	1.0	ND
Benzene:	1.0	ND
1,2-Dichloroethane:	1.0	ND
Trichloroethylene:	1.0	ND
1,2-Dichloropropane:	1.0	ND
Bromodichloromethane:	1.0	ND
CIS-1,3-Dichloropropene:	1.0	ND
Toluene:	1.0	ND
Trans-1,3-Dichloropropene:	1.0	ND
1,1,2-Trichloroethane:	1.0	ND
Tetrachloroethylene:	1.0	ND
Dibromochloromethane:	1.0	ND
Chlorobenzene:	1.0	ND
1,1,1,2-Tetrachloroethane:	1.0	ND
Ethylbenzene:	1.0	ND
M,P-Xylenes:	1.0	ND
O-Xylene:	1.0	ND
Bromoform:	1.0	ND
1,1,2,2-Tetrachloroethane:	1.0	ND
1,3-Dichlorobenzene:	1.0	ND
1,4-Dichlorobenzene:	1.0	ND
1,2-Dichlorobenzene:	1.0	ND

The sample was analyzed in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.



V. Jesse Burns, Chemist

** The sample was reanalyzed out of holding time.
* J = reportable concentration less than the lowest concentration level of the instrument calibration curve but above the detection limit. ND = concentration of the compound cannot be found at or above the detection limit. B = concentration of the compound was found above the detection limit in the laboratory blank sample. Blank = a reportable contaminant present.

TTL
Technology and Tradition

Construction Materials Engineering and Testing ■
Environmental Engineering and Consulting ■
Geotechnical Engineering ■
Analytical Services ■

Client: Alabama Department of Transportation
Sample Date: October 20, 2004
Date Analyzed: October 26, 2004
Analyzed By: TTL Personnel (VJB)
Sample Type: Aqueous
Sampled By: TTL L ab Personnel
Sample Site: Coliseum Boulevard Plume, Montgomery, AL
Sample ID: Blank (N, N Dup, O, P, Equipment Rinse)
TTL Lab Number: 041021032-006A
TTL Job Number: 0700-024

VOLATILE ORGANIC HYDROCARBONS

COMPOUNDS	RESULTS, µg/L	FLAG*
Chloromethane:	1.0	ND
Vinyl Chloride:	1.0	ND
Chloroethane:	1.0	ND
Trichlorofluoromethane:	1.0	ND
1,1-Dichloroethene:	1.0	ND
Methylene Chloride:	1.0	ND
Trans-1,2-Dichloroethene:	1.0	ND
1,1-Dichloroethane:	1.0	ND
Cis-1,2-Dichloroethene:	1.0	ND
Chloroform:	1.0	ND
1,1,1-Trichloroethane:	1.0	ND
Carbon Tetrachloride:	1.0	ND
Benzene:	1.0	ND
1,2-Dichloroethane:	1.0	ND
Trichloroethylene:	1.0	ND
1,2-Dichloropropane:	1.0	ND
Bromodichloromethane:	1.0	ND
CIS-1,3-Dichloropropene:	1.0	ND
Toluene:	1.0	ND
Trans-1,3-Dichloropropene:	1.0	ND
1,1,2-Trichloroethane:	1.0	ND
Tetrachloroethylene:	1.0	ND
Dibromochloromethane:	1.0	ND
Chlorobenzene:	1.0	ND
1,1,1,2-Tetrachloroethane:	1.0	ND
Ethylbenzene:	1.0	ND
M,P-Xylenes:	1.0	ND
O-Xylene:	1.0	ND
Bromoform:	1.0	ND
1,1,2,2-Tetrachloroethane:	1.0	ND
1,3-Dichlorobenzene:	1.0	ND
1,4-Dichlorobenzene:	1.0	ND
1,2-Dichlorobenzene:	1.0	ND

The sample was analyzed in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods, EPA, SW-846.

V. Jesse Burns, Chemist

** The sample was reanalyzed out of holding time.
* J = reportable concentration less than the lowest concentration level of the instrument calibration curve but above the detection limit. ND = concentration of the compound cannot be found at or above the detection limit. B = concentration of the compound was found above the detection limit in the laboratory blank sample. Blank = a reportable contaminant present.

TTL WORK ORDER NUMBER
041021 032

TTL Technology and Tradition

Sheet 1 of 1

Chain of Custody Form

Client: ALDOT CBP
Contact: Kiclada Dixm
Mailing Address: 4154 LOMAC ST
City, State, Zip: Montg. AL 36106
Phone No.: 334-244-0166
Date: 10-20-04
Sampled By: WGM, KJM
Sample Site: LOW LYING AREA
TTL Job No.: 0700-024 **Client P.O. #**

Sample Security Requirements

1. Condition of Contents: Good
2. Sealed for Shipping By: [illegible]
3. Initial Contents Temp.: ICE °C Seal Applied Yes ____ No ____
4. Sampling Status: Complete Expected Completion Date ____
5. Custody Seal Intact Upon Receipt by Laboratory: Yes ____ No ✓
6. Condition of Contents: Good
7. Comments: ICE
8. Reporting Status: Routine; ASAP By ____; Rush By ____

Date	Time	Sample ID/Description	Sample Type	Sample Method		# of Containers	Preservatives	Analysis Parameters
			Solid, Etc.	Grab	Comp			
10/20/04	3:00 pm	N	Aqueous	✓		3	HCl, ICE	VOC
↓	↓	N Dup	↓	↓		↓	↓	↓
	3:20 pm	O						
	3:35 pm	P						
		BLANK						
↓	3:50 pm	Equipment Rinse	↓	↓		↓	↓	↓

CUSTODY TRANSFERS PRIOR TO SHIPPING

Relinquished by: (signed) Date/Time
1. [signature] 10/20/04
2. [signature] 10-21-04 1:10PM
3. ____

Received by (signed) Date/Time
1. [signature] 10-21-04 9:30AM
2. ____
3. ____

SHIPPING DETAILS

Air Bill #: ____
Method of Shipment: TTL
Received By Lab: Carmen Burch
Date/Time 10/21/04 1310

TTL, Inc. - Tuscaloosa Office/Laboratory: 3516 Greensboro Avenue, Tuscaloosa, Alabama 35401, Telephone (205) 345-0816, FAX (205) 345-0992
TTL, Inc. - Montgomery Office: 4154 Lomac Street, Montgomery, Alabama 36106, Telephone (334) 244-0766, FAX (334) 244-6668
TTL, Inc. - Florence Office: 523 South Wood Avenue, Florence, Alabama, Telephone (256) 766-4622, FAX (256) 760-4626

NOTE: Please ...

TTL WORK ORDER NUMBER
041021 032

TTL Technology and Tradition

Sheet 1 of 1

Chain of Custody Form

Client: ALDOT CBP
Contact: Kidada Dixon
Mailing Address: 4154 LOMAC ST
City, State, Zip: Montg. AL 36106
Phone No.: 334-244-0766
Date: 10-20-04
Sampled By: WGM, KJM
Sample Site: LOW LYING AREA
TTL Job No.: 0700-024 **Client P.O. #**

Sample Security Requirements

1. Condition of Contents: Good
2. Sealed for Shipping By: [illegible]
3. Initial Contents Temp.: ICE °C Seal Applied Yes ___ No ___
4. Sampling Status: Complete Expected Completion Date ___
5. Custody Seal Intact Upon Receipt by Laboratory: Yes ___ No ✓
6. Condition of Contents: Good
7. Comments: Ice
8. Reporting Status: Routine; ASAP By ___; Rush By ___

Date	Time	Sample ID/Description	Sample Type	Sample Method		# of Containers	Preservatives	Analysis Parameters
			Solid, Etc.	Grab	Comp			
10/20/04	3:00 pm	N	Aqueous	✓		3	HCl, ICE	VOC
↓	↓	N Dup	↓	↓		↓	↓	↓
	3:20 pm	O						
	3:35 pm	P						
		BLANK						
↓	3:50 pm	Equipment Rinse	↓	↓		↓	↓	↓

CUSTODY TRANSFERS PRIOR TO SHIPPING

Relinquished by: (signed) Date/Time
1. [signature] 10/20/04
2. [signature] 10-21-04 1:10 PM
3. ___

Received by (signed) Date/Time
1. [signature] 10-21-04 9:30 AM
2. ___
3. ___

SHIPPING DETAILS

Air Bill #: ___
Method of Shipment: TTL
Received By Lab: Carmen Burt
Date/Time 10/21/04 1310

TTL, Inc. - Tuscaloosa Office/Laboratory: 3516 Greensboro Avenue, Tuscaloosa, Alabama 35401, Telephone (205) 345-0816, FAX (205) 345-0992
TTL, Inc. - Montgomery Office: 4154 Lomac Street, Montgomery, Alabama 36106, Telephone (334) 244-0766, FAX (334) 244-6668
TTL, Inc. - Florence Office: 523 South Wood Avenue, Florence, Alabama, Telephone (256) 766-4622, FAX (256) 760-4626